

REMARKS / ARGUMENTS

Claims 2, 5, 7-13 and 15 are pending in the application.

Claims 2, 7 and 10-13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Holzapfel et al. (US 6,392,224) in view of Braun (US 5,508,088) and Shelander (US 4,899,048). To support the rejection, the Examiner attempts to read a majority of the claim features of the present application on Holzapfel's Figures 1, 2b and 2a, and to read the remaining features on Brauns's Figures 1b and 3, and further on Shelander's Figure 1, from which the Examiner concludes that the invention of the aforementioned claims - which include in particular the two independent claims 10 and 12 - would have been obvious to a person of ordinary skill in the art at the time the invention was made.

Applicant has argued previously in an amendment dated October 24, 2002 that Holzapfel et al. ('224) as well as Braun ('088) use only an opaque/transparent (or reflective/non-reflective) differentiation of the markings, while claims 10 and 12 require a "detectable gradation of optical density levels", so that Holzapfel et al., whether by itself or in any combination with Braun ('088), cannot be said to make claims 10 and 12 obvious in the sense of 35 U.S.C. 103(a).

However, in the Final Action dated January 9, 2003, under "Response to Arguments", the Examiner found that "with regards to Holzapfel et al., the opaque/transparent differentiation can be viewed as the groups of code markings having a detectable gradation of optical density levels in its broadest interpretation".

In a telephone conversation with the Examiner on July 3, 2003, applicant's undersigned agent proposed a claims amendment to define the meaning of a "gradation of optical density levels" in a manner that unmistakably excludes a mere opaque/transparent differentiation by requiring at least three different optical density levels. As the Examiner indicated a willingness to consider such a proposal, applicant hereby respectfully submits the foregoing claims amendment, wherein the independent claims 10 and 12 (as currently amended) specifically state that:

"the at least one code track, the first group of code markings and the at least one higher-order group of code markings have different optical density levels in comparison to each other, so that there are at least three different optical density levels with a detectable gradation of optical density"

This is directly supported, for example by Figure 1b of the present application showing the code track and the first and second group of code markings with different optical densities. Thus, between the code track and the first and second group of code markings, Figure 1b shows three different optical density levels with a detectable gradation of optical density. The amendment merely serves to more clearly define the meaning of the concept of optical density levels with a detectable gradation as it relates to the present invention. No new matter is thereby introduced in the application.

The fact that the gradation of optical density has at least three levels sets claims 10 and 12 (as currently amended) clearly apart from the Holzapfel ('224) reference, which has only a binary differentiation of density levels, i.e., opaque vs.

transparent, according to the specific text portion (col. 5, lines 1-5) that was cited by the Examiner.

Relative to the Braun ('088) reference, the Examiner found the "code markings have different degrees of reflectivity (Fig. 1b and Fig. 3, #25 and 27)". However, Braun ('088) has only two "degrees of reflectivity", i.e., reflective and non-reflective (see description of Fig. 1b in col. 3, lines 57-63), which are the result of transparent and opaque windows (e.g., #25 and #27, respectively, in Fig. 3) with a reflective means 24 arranged behind the windows.


The Shelander ('048) reference, which the Examiner cited as an example for using an LED and phototransistor, uses a "reticular grating" (see Abstract) which alternately transmits and obstructs a light beam. Thus, Shelander ('048) again uses a binary differentiation of density levels, i.e., opaque and transparent.

Based on the foregoing amendment and remarks, applicant respectfully submits that independent claims 10 and 12 (as currently amended) are patentably distinguished from Holzapfel ('224), Braun ('088), Shelander ('048), regardless of whether these references are considered by themselves or in any combination. Consequently, the rejection of claims 10 and 12 under 35 U.S.C. 103(a) as being unpatentable over Holzapfel et al. (US 6,392,224) in view of Braun (US 5,508,088) and Shelander (US 4,899,048) should be withdrawn and, since there are no other rejections concerning claims 10 and 12, claims 10 and 12 (as currently amended) should be allowed. Furthermore, claims 2, 5, 7-9, 11, 13 and 15 should be allowed because they depend on what should now be allowable independent claims 10 and 12.

Applicant respectfully submits that all open issues have been appropriately addressed. Allowance of the present application with claims 2, 5, 7-13 and 15 is hereby earnestly solicited.

Respectfully submitted,

July 9, 2003
DARBY & DARBY, P.C.
805 Third Avenue
New York, N.Y. 10022
Phone (212) 527-7700


Walter Kupper
Reg. No. 34,954
Patent Agent for Applicants

Attachments:

- Request for Continued Examination with appropriate fee
- Petition for a 3-month extension of time with appropriate fee
- Amended drawings reflecting approved corrections, with separate submission letter